## ABSTRACT

A test stand and method for testing a disk of a hard disk drive. The disk is placed onto a spindle motor of the test stand. The test stand also contains a head that is connected to a controller. The controller causes the head to write a reference signal and a test signal onto the disk. The amplitude of the reference signal is then reduced, typically with a DC erase current. The head reads back the test signal from areas of the disk that are heated by a heating element. The reference signal is also read back and used to normalize the test signal. Using a reference signal with a reduced amplitude has been found to produce less scattered data than methods of the prior art.